Title (en)
CHARGING DEVICE FOR CHARGING A BATTERY PACK

Title (de)
LADEVORRICHTUNG ZUM AUFLADEN EINES AKKUPACKS

Title (fr)
DISPOSITIF DE CHARGEMENT POUR CHARGER UNE BATTERIE D'ACCUMULATEURS

Publication
EP 2462686 B1 20170222 (DE)

Application
EP 10720640 A 20100607

Priority
• DE 102009028322 A 20090807
• EP 2010057877 W 20100607

Abstract (en)
[origin: WO2011015391A1] In a charging device (100) for charging a battery pack (190), comprising a control circuit (120) for a switching power unit transformer (150) associated with the loading device (100), said transformer having at least one primary winding (152) switchable by a power switch (158), and at least one first secondary winding (154) for generating an electrical output voltage (UOUT) for charging the battery pack (190), wherein the output voltage (UOUT) has a first amplitude which is predefinable by a control unit (110) and adjustable by a first voltage limiting control loop (160), the transformer (150) has at least one second secondary winding (156) for generating at least one electrical auxiliary voltage (UH) having a second amplitude which is predefinable by the control unit (110) and adjustable by a second voltage limiting control loop (180) so as to at least reduce power supply associated with the operation of the control circuit (120) from the primary winding (152) to the secondary windings (154, 156) in standby mode of the control circuit (120).

IPC 8 full level
H02M 3/335 (2006.01)

CPC (source: EP US)
H02M 3/33523 (2013.01 - EP US)

Citation (examination)
• WO 2006061924 A1 20060615 - SANKEN ELECTRIC CO LTD [JP], et al
• US 5812383 A 19980922 - MAJID NAVEED [US], et al

Cited by
CN107846060A

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)
DE 102009028322 A1 20110210; CN 102474190 A 20120523; CN 102474190 B 20160810; EP 2462686 A1 20120613; EP 2462686 B1 20170222; RU 2012108169 A 20130920; US 2012194131 A1 20120802; US 9343981 B2 20160517; WO 2011015391 A1 20110210

DOCDB simple family (application)
DE 102009028322 A 20090807; CN 201080035033 A 20100607; EP 10720640 A 20100607; EP 2010057877 W 20100607; RU 2012108169 A 20100607; US 201013383395 A 20100607